Amendments to the Claims:

The listing of claims shall replace all prior versions and listings of the claims in the subject application.

Listing of the Claims:

1. (Currently Amended) An apparatus for generating high intensity X-rays of a characteristic line spectra comprising:

a source for generating a focused beam of electrons; and

~~at least one~~ a plurality of X-ray ~~anode~~ anodes, each in the form of a capillary tube having ~~the interior surface of~~ a ~~metallic tube~~ bore, an interior surface of the bore comprising a metallic tube layer with a thickness of 10-1000 atomic layers;

wherein the plurality of X-ray anodes include at least a first linear row of anodes and a second linear row of anodes, the metallic tube layer of each anode of the first linear row comprising a first metallic material and the metallic tubular of each anode of the second linear row comprising a second metallic material, the first metallic material being different than the second metallic material.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The apparatus of claim 1 ~~3~~, further comprising an electron beam deflector adapted to selectively deflect the focused beam of electrons along one of the first and second linear rows ~~to one of the first X-ray anode and the second X-ray anode.~~

5. (Canceled)

6. (Currently Amended) An apparatus for generating high intensity X-rays comprising:

a source for generating a focused beam of electrons;

at least one first X-ray anode and at least one second X-ray anode, each of the first and second X-ray anodes being in the form of an interior surface of a metallic tube, the metallic tube of the first X-ray anode comprising a first material, and the metallic tube of the second X-ray anode comprising a second material, the second material being different from the first material; and

an electron beam deflector adapted to selectively deflect the focused beam of electrons to one of the first X-ray anode and the second X-ray anode;

wherein the at least one first X-ray anode comprises a plurality of first X-ray anodes and the at least one second X-ray anode comprises a plurality of second X-ray anodes; and

~~The apparatus of claim 5,~~ wherein the electron beam deflector is adapted to deflect the electron beam to (i) one of the plurality of first X-ray anodes and the plurality of second X-ray anodes exclusively and (ii) at least one first X-ray anode and at least one second X-ray anode simultaneously.

7. (Original) The apparatus as in claim 1, further comprising a variable voltage power supply for powering the source.

8. (Currently Amended) The apparatus of claim 1, wherein the first material ~~the metallic tube~~ comprises one of Tungsten and Molybdenum.

9. (Currently Amended) The apparatus of claim 1, wherein a heat-conducting layer overlies the metallic tube layer of each X-ray anode of the plurality of X-ray anodes.

10. (Original) The apparatus of claim 9, wherein the heat-conducting layer comprises one of gold, silver and copper.

11. (Currently Amended) The apparatus of claim 1 wherein an X-ray radiation-absorbing layer overlies the metallic tube layer of each X-ray anode of the plurality of X-ray anodes.

12. (Canceled)

13. (Currently Amended) The apparatus of claim 1, wherein an end of each ~~the~~ metallic tube layer through which the X-rays exit is sealed by a thin layer of metallic material of essentially the same composition as the material comprising the metallic tube layer.

14. (Unchanged) A guide tube anode assembly for use in an X-ray generation device, the guide tube anode assembly comprising:

a metallic interior tubular layer having a thickness of between 10-1000 atomic layers; and

an X-ray radiation absorbing tubular layer at least partially overlying the metallic interior tubular layer.

15. (Original) The guide tube anode assembly of claim 14, further comprising a heat conducting tubular layer contained between the metallic interior tubular layer and the X-ray radiation absorbing tubular layer.

16. (Original) The guide tube anode assembly of claim 14, wherein the metallic interior tubular layer has a thickness of between about 10-18 atomic layers.

17. (Original) The guide tube anode assembly of claim 14, further comprising a thin metal layer covering at least one end of the guide tube anode assembly, the thin metal layer comprising essentially the same material as the metallic interior tubular layer.

18. (Currently Amended) A method of generating a highly directional beam of X-ray radiation, the method comprising:

directing a high energy electron beam from an electron beam generator into first ends of ~~one or more~~ a first linear array of capillary tube ~~tubular~~ anodes, each ~~tubular~~ capillary tube anode of the first linear array of capillary tube anodes comprising a cylindrical metal tube having a thin wall thickness;

creating X-ray radiation as a result of grazing collisions with the interior surface of ~~each~~ the metal ~~tube~~ tubes of the ~~one or more~~ first linear array of capillary tube ~~tubular~~ anodes;

directing a beam of X-ray radiation having essentially a characteristic line spectrum related to a specific metal utilized in the metal tubes of the ~~one or more~~ first linear array of capillary tube ~~tubular~~ anodes down the metal tubes and out of second ends of the capillary tube ~~tubular~~ anodes.

19. (Currently Amended) The method of claim 18, ~~wherein the one or more tubular anodes comprises a plurality of tubular anodes,~~ further comprising deflecting the high-energy electron beam into a fractional portion of the plurality of capillary tube ~~tubular~~ anodes.

20. (Canceled)

21. (New) The apparatus of claim 4, wherein the electron beam deflector is further adapted to selectively deflect the focused beam of electrons between the first and second linear rows.

22. (New) The method of claim 18, further comprising directing the high energy electron beam from the electron beam generator into first ends of a second linear array of capillary tube anodes, each tubular anode of the second linear array of capillary tube anodes comprising a cylindrical metal tube having a thin wall thickness, wherein a metallic material comprising the cylindrical metal tube of each capillary tube anode of the second array is different from a metallic material comprising the cylindrical metal tube of each capillary tube anode of the first array.

23. (New) The method of claim 22, wherein said directing a high energy electron beam from an electron beam generator into first ends of a first linear array of capillary tube anodes further comprises moving the electron beam linearly along the first ends.

24. (New) The method of claim 18, further comprising directing the high energy electron beam between the first ends of the first array and the first ends of the second array.

25. (New) The method of claim 1, wherein each X-ray anode of the first linear row of anodes is in contact with another X-ray anode of the first linear row of anodes.